

SEQUENCE LISTING

<110> EISENBACH-SCHWARTZ, Michal
COHEN, Irun R.
BESERMAN, Pierre
MOSONEGO, Alon
MOALEM, Gila

<120> ACTIVATED T-CELLS, NERVOUS SYSTEM-SPECIFIC ANTIGENS AND THEIR USES

<130> EIS-SCHWARTZ=2A

<150> US 09/314,161

<151> 1999-05-19

<150> US 09/218,277

<151> 1998-12-22

<150> PCT/US98/14715

<151> 1998-07-21

<150> IL 124500

<151> 1998-05-19

<160> 29

<170> PatentIn version 3.1

<210> 1

<211> 612

<212> DNA

<213> Homo sapiens

<400> 1

```
ccaagaagat cccacagcag cttccgaagg cctggatgtg atggcatcac agaagagacc      60
ctcacagcga cacggatcca agtacttggc cacagcaagt accatggacc atgccoggca      120
tggtcttctc ccaaggcaca gagacacggg catccttgac tccatcgggc gcttctttag      180
cggtgacagg ggtgcgccc aagcggggctc tggcaaggac tcacacacaa gaactaccca      240
ctacggctcc ctgcccaga agtcgcagag gaccaagat gaaaaccag tagtccactt      300
cttcaagaac attgtgacac ctcgtaacac cctccatcc caaggaaagg ggagaggcct      360
gtccctcagc agatttagct ggggaggaag agacagccgc tctggatctc ccatggcaag      420
acgctgagag cctccctgct cagccttccc gaatcctgcc ctcggttct taatataact      480
gccttaaagc tttaattcta cttgcaccaa atagctagtt agagcagacc ctctcttaat      540
cccgtagggc tgtgaacgag gcgggccagc ccacggcacc ctgactggct aaaactgttt      600
gtcccttttt at                                                                612
```

<210> 2

cacctgctcc cgaattactc accgagacac acgggctgag cagacggccc ctgtgatgga 1680
gacaaagagc tcttctgacc atatccttct taacacccgc tggcatctcc tttcgcgcct 1740
ccctccctaa cctactgacc caccttttga ttttagcgca cctgtgattg ataggccttc 1800
caaagagtcc cacgctggca tcaccctccc cgaggacgga gatgaggagt agtcagcgtg 1860
atgccaaaac gcgtcttctt aatccaattc taattctgaa tgtttcgtgt gggcttaata 1920
ccatgtctat taatatatag cctcgatgat gagagagtta caaagaacaa aactccagac 1980
acaaacctcc aaatttttca gcagaagcac tctgcgtcgc tgagctgagg tcggctctgc 2040
gatccatacg tggccgcacc cacacagcac gtgctgtgac gatggctgaa cggaagtggt 2100
acactgttcc tgaatattga aataaaacaa taaactttt 2139

<210> 3
<211> 581
<212> DNA
<213> Homo sapiens

<400> 3
taatattctag ggktttgact ctgaccogtg ttggggctct cacttcatgg cttctcacgc 60
ttgtgctgca tatccacac caattagacc caaggatcag ttggaagttt ccaggacatc 120
ttcattttat ttccaccctc aatccacatt tccagatgtc tctgcagcaa agcgaaattc 180
caggcaagcc ttagggaaaa aaggaaaaac aaagaaaatg aaacaattgg cagtgaagg 240
cagaaagaga agatggagcc cttagagaag ggagtatccc tgagttagtg gggaaaagg 300
gaggagaagg ggaggaggag aggaggagga aagcaggcct gtccctttaa gggggttggc 360
tgtcaatcag aaagcccttt tcattgcagg agaagaggac aaagatactc agagagaaaa 420
agtaaaagac cgaagaagga ggctggagag accaggatcc ttccagctga acaaagtcag 480
ccacaaagca gactagccag ccggetacaa ttggagtcag agtcccaaag acatgggtaa 540
gtttcaaaaa ctttagcatt gaagattcaa gaggacacag g 581

<210> 4
<211> 1762
<212> DNA
<213> Homo sapiens

<400> 4
ctgctttcag agcctgtgac ttcttgtgtg cctctcctgt ttctcagcaa catggcatag 60
ggcctgggat accaggtctg gggatctcag ggactcttag cactttaaga cacatgtgtt 120
cccaggccct ggtgtgttcc tctagtgcc aagagatgtt tcatgctttg ctgactttgt 180

ataaagtctg tttgtagctg ttttgacaga atctcagcgt ataactgagg gtggggacat 240
tagccaagct gcattatagg aggacaaaac tgccatacaa agtgtccaaa atcattaagc 300
ctgcattttt attattggga gtaatatcaa acctcctatt ttccaatttt catttcttgt 360
cctgtgctag ctccatcctg tttggactgc tctcccata tgtaaactaa gaagaatcaa 420
gcattctttg caacaaatac acacgatgct caaaaatgtc caggagcatc caatttccaa 480
agtttcctcc acctggaatg ctcttcacgc taaaatcctg tctgacaata ccagcatctc 540
tggcctgcac tcatcccttc ctggaactcc aagtgcattt acctctgtt accacttact 600
tggctgcctg aattgttagt tgaaaatatt aggtctactt agctaattct tctcaggaa 660
attaaagact cccatatggc agagtctgtg tcttttctct cttcatatcc cgtataaacac 720
ccagcataat gctgggcata tagtgagtat tccataaata gttgatgaat gactaaaata 780
agcaagcaaa caaacagact agaacaataa gaaagaaggg actggatttc ataatctctc 840
tggcttgcta tttgaattgc tgaattatta ttatttatta aatatttttt aaattctggc 900
aataaaaggc aaggatttat tttcttctt tctttttttt tttcttgaga cagagtctcg 960
ctcttactgc ccaggctgga gtacaatggc gcaatcttgg ctacaggcaa cctccgcctc 1020
ctcctgggtt taacagattc tctgtctca gcctcctgag tagctgggat tacaggcata 1080
cgcccatgcc cggctaattt ttgtattttt agtagagacg gggttttgcc atgttggcca 1140
ggctggtctt gaactcctga cctcatgtga tccacctgcc tcagcctccc aaagtgtgg 1200
gattacaggc atgcgccacc gtgcccgcc aaagatttat tttcaagaat gaaacaaagt 1260
aaggattctg ggtcaatctc acatgctgaa agccaaaacc tctagccgct cctgcttttt 1320
gacttcggag tgcccactat ctccgagcct gtgagcacag ggctggcag aggggtttga 1380
gtggcatgag ctacctactg gatgtgctg actgtttccc cttcttcttc ccaggttg 1440
ttagagtgtg gtgcaagatg tctggtaggg gcccccttg cttccctggg gccactgga 1500
ttgtgtttct ttgggggtggc actgttctgt ggctgtggac atgaagccct cactggcaca 1560
gaaaagctaa ttgagacctt tttctccaaa aactaccaag actatgagta tctcatcaat 1620
gtgtaagtac ctgccctccc acacagacct atcttttttt tccctctctc catcctggag 1680
atagagaact cttcagtacc ttagtaacta gcaggggact ggggtggagc cagaccggat 1740
tcccaggtct tccctctgtg ca 1762

<210> 5
<211> 828

[illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Year	Total population		Male		Female		Sex ratio males per 100 females
	No.	%	No.	%	No.	%	
1960	1,780,000	100.0	900,000	50.6	880,000	49.4	102.5
1961	1,800,000	100.0	910,000	50.6	890,000	49.4	102.5
1962	1,820,000	100.0	920,000	50.6	900,000	49.4	102.5
1963	1,840,000	100.0	930,000	50.6	910,000	49.4	102.5
1964	1,860,000	100.0	940,000	50.6	920,000	49.4	102.5
1965	1,880,000	100.0	950,000	50.6	930,000	49.4	102.5
1966	1,900,000	100.0	960,000	50.6	940,000	49.4	102.5
1967	1,920,000	100.0	970,000	50.6	950,000	49.4	102.5
1968	1,940,000	100.0	980,000	50.6	960,000	49.4	102.5
1969	1,960,000	100.0	990,000	50.6	970,000	49.4	102.5
1970	1,980,000	100.0	1,000,000	50.6	980,000	49.4	102.5
1971	2,000,000	100.0	1,010,000	50.6	990,000	49.4	102.5
1972	2,020,000	100.0	1,020,000	50.6	1,000,000	49.4	102.5
1973	2,040,000	100.0	1,030,000	50.6	1,010,000	49.4	102.5
1974	2,060,000	100.0	1,040,000	50.6	1,020,000	49.4	102.5
1975	2,080,000	100.0	1,050,000	50.6	1,030,000	49.4	102.5
1976	2,100,000	100.0	1,060,000	50.6	1,040,000	49.4	102.5
1977	2,120,000	100.0	1,070,000	50.6	1,050,000	49.4	102.5
1978	2,140,000	100.0	1,080,000	50.6	1,060,000	49.4	102.5
1979	2,160,000	100.0	1,090,000	50.6	1,070,000	49.4	102.5
1980	2,180,000	100.0	1,100,000	50.6	1,080,000	49.4	102.5
1981	2,200,000	100.0	1,110,000	50.6	1,090,000	49.4	102.5
1982	2,220,000	100.0	1,120,000	50.6	1,100,000	49.4	102.5
1983	2,240,000	100.0	1,130,000	50.6	1,110,000	49.4	102.5
1984	2,260,000	100.0	1,140,000	50.6	1,120,000	49.4	102.5
1985	2,280,000	100.0	1,150,000	50.6	1,130,000	49.4	102.5
1986	2,300,000	100.0	1,160,000	50.6	1,140,000	49.4	102.5
1987	2,320,000	100.0	1,170,000	50.6	1,150,000	49.4	102.5
1988	2,340,000	100.0	1,180,000	50.6	1,160,000	49.4	102.5
1989	2,360,000	100.0	1,190,000	50.6	1,170,000	49.4	102.5
1990	2,380,000	100.0	1,200,000	50.6	1,180,000	49.4	102.5
1991	2,400,000	100.0	1,210,000	50.6	1,190,000	49.4	102.5
1992	2,420,000	100.0	1,220,000	50.6	1,200,000	49.4	102.5
1993	2,440,000	100.0	1,230,000	50.6	1,210,000	49.4	102.5
1994	2,460,000	100.0	1,240,000	50.6	1,220,000	49.4	102.5
1995	2,480,000	100.0	1,250,000	50.6	1,230,000	49.4	102.5
1996	2,500,000	100.0	1,260,000	50.6	1,240,000	49.4	102.5
1997	2,520,000	100.0	1,270,000	50.6	1,250,000	49.4	102.5
1998	2,540,000	100.0	1,280,000	50.6	1,260,000	49.4	102.5
1999	2,560,000	100.0	1,290,000	50.6	1,270,000	49.4	102.5
2000	2,580,000	100.0	1,300,000	50.6	1,280,000	49.4	102.5
2001	2,600,000	100.0	1,310,000	50.6	1,290,000	49.4	102.5
2002	2,620,000	100.0	1,320,000	50.6	1,30		

[illegible][illegible]

atacagagtc aagtaatttc tcaccttgta aaacgaattg attcattaac caggggagag	360
ctctactgca tgatgtggct gtgtgtctac agcaagcacc ctatgactct aagtcactcg	420
gacatattga tgtggcaaag cccaaatatt gttcacttcc ctgaggaaaa ctcagtgcta	480
gatcaaacag aggtgtggaa taaatcttta tgatttgatt ctctgggcct gggccatgag	540
acccatgatg cctcagagac atcggacttc cagtcaagtg tatatggaga aagccaagcc	600
tgggatgtac tgctttttgc agagcatggg tttttccctt atttagttat gattttattt	660
ctacccttcc tcattcccaa agggatttga ggaggagtg ctttcttttc tactctcatt	720
cacattctct cttctgttcc ctacagctca cttcatgat tgctgccact tacaactttg	780
cgtccttaa actcatgggc cgaggcacca agttctgac ccccgtagaa atcccccttt	840
ctctaatagc gaggtcttaa ccacacagcc tacaatgctg cgtctcccat cttaactctt	900
tgcctttgcc accaactggc cctcttctta cttgatgagt gtaacaagaa aggagagtct	960
tgcagtgatt aaggtctctc tttggactct cccctcttat gtacctcttt tagtcatttt	1020
gcttcatagc tggttcctgc tagaaatggg aaatgcctaa taatatgact tcccaactgc	1080
aagtcacaaa ggaatggagg ctctaattga attttcaagc atctcctgag gatcagaaaag	1140
taatttcttc tcaaagggtta cttccactga tggaaacaaa gtggaaggaa agatgctcag	1200
gtacagagaa ggaatgtctt tggtcctctt gccatctata ggggccaaat atattctctt	1260
tgggtgtacaa aatggaattc attctgcgtc tctctattac actgaagata gaagaaaaaa	1320
gaatgtcaga aaaacaataa gagcgtttgc ccaaactctgc ctattgcagc tgggagaagg	1380
gggtcaaagc aaggatcttt caccacaga aagagagcac tgaccccgat ggcgatggac	1440
tactgaagcc ctaactcagc caaccttact tacagcataa gggagcgtag aatctgtgta	1500
gacgaagggg gcatctggcc ttacacctcg ttagggaaga gaaacagggc cttgtcagca	1560
tcttctcact cccttctcct tgataacagc taccatgaca accctgtggt ttccaaggag	1620
ctgagaatag aaggaaacta gcttacatga gaacagactg gcctgaggag cagcagttgc	1680
tgggtggctaa tgggtgaacc tgagatggc ctctggtaga cacaggatag ataactcttt	1740
ggatagcatg tctttttttc tgttaattag ttgtgtactc tggcctctgt catatcttca	1800
caatggtgct catttcatgg ggtattatcc attcagtcac cgtaggatgat ttgaaggctc	1860
tgatttgttt tagaatgatg cacatttcat gtattccagt ttgtttatta cttatttggg	1920
gttgcatcag aaatgtctgg agaataattc tttgattatg actgtttttt aaactaggaa	1980
aattggacat taagcatcac aaatgatatt aaaaattggc tagttgaatc tattgggatt	2040

ttctacaagt attctgcctt tgcagaaaca gatttggtga atttgaatct caatttgagt	2100
aatctgatcg ttctttctag ctaatggaaa atgattttac ttagcaatgt tatcttggtg	2160
tgttaagagt taggtttaac ataaagggtta ttttctctg atatagatca cataacagaa	2220
tgcaccagtc atcagctatt cagttggtaa gcttccagtc atcagctatt cagttggtaa	2280
gcttcccagg aaaaaggaca ggcagaaaga gtttgagacc tgaatagctc ccagatttca	2340
gtcttttaat gtttttggtta actttgggtt aaaaaaaaaa aaagtctgat tggttttaat	2400
tgaaggaaaag atttgtacta cagttctttt gttgtaaaga gttgtgttgt tcttttcccc	2460
caaagtgggt tcagcaatat ttaaggagat gtaagagctt tacaaaaaga cacttgatac	2520
ttgttttcaa accagtatac aagataagct tccaggctgc atagaaggag gagagggaaa	2580
atgttttgta agaaaccaat caagataaag gacagtgaag taatccgtac cttgtgtttt	2640
gttttgattt aataacataa caaataacca acccttccct gaaaacctca catgcataca	2700
tacacatata tacacacaca aagagagtta atcaactgaa agtggttcctt catttctgat	2760
atagaattgc aattttaaca cacataaagg ataaactttt agaaacttat cttacaaagt	2820
gtattttata aaattaaaga aaataaaatt aagaatgttc tcaatcaaac atcgtgtcct	2880
ttgagtgaat tgttctatth gacttcacaa tagaaactta ataatcgtac cttctcaaga	2940

<210> 9
 <211> 17538
 <212> DNA
 <213> Homo sapiens

<400> 9	
atggaaatgt tctgtatttg tggtgtctga tgagataacc actaactgta gtgctattga	60
gcatttgaaa catggctagt gtaatcaatg aaccaaattt ttaattttat ttaattgtaa	120
ttaattttta gtggccacat gcaggagtg actgctgcat tggacagcac ggctctaaat	180
tgagcctttt ttccttattt ggtgaggcat acttgcttta agattgggaa gtctatthtt	240
ggaacctgct accaatgctg gtctcacact tgcaattctc agctgagcca agaggtgaga	300
gaaaggatcat tttccattcc aagatctcac tctccctgtg gacactgagg aaactggcaa	360
gtgatgtgaa ggctggagag cgtgtcctgt atgctggctc tgtcccttct gcctgtgttg	420
actgacatag ttagttgctg cccttgctgg tctcccttcc tccaaccttg cctctctgag	480
cacacctgac attcatctca tgacttccct aaaaacattc tttgggaaca agaaactaac	540
aaatcccaag tgacctatca catatacaaa catacagggc agagtttgga ttgcgggtag	600

aagaaagggga	ggtagacat	taagaagaat	ggtctgggtga	tgacagttgt	gagataatag	660
aaacaggaaa	aagaaatcta	agttttcttt	cttttttttaa	gaaccaataa	taatttctct	720
cttttgacta	gtcagtaggg	ctgggggtgga	ttggaggaag	cttacatatt	ccatgaacaa	780
gcctcttctt	aaggtcctgt	aagtgatcct	gccccactga	ttagccccta	gaagaccctt	840
caaaggtttg	atctccagga	gggagtgagg	gaggaaagcc	ctgtaccagg	cagcctctgc	900
tccattgctc	tgggggggtg	gggaagacaa	accctgggtca	tcccctcagt	ctgtagccct	960
tttgtgtgag	tgccctggcaa	gggtgacgtg	gggctgtttc	tgcgggcaca	gctgcagcaa	1020
ttaccggagt	ggaggcaggg	cccaggcagc	actgccctcc	aagatcttcc	cttgggcttt	1080
tcagcagtaa	ggggacatgc	acccaaggga	cctccacttg	gcctgacctt	gctgcggggg	1140
ctctctgtcc	ccaggaacag	tagagatggc	aagcttatcg	agaccctctc	tgcccagctg	1200
cctctgtctc	ttctctctcc	tcctctctct	ccaagtgtct	tccagctatg	caggtaagac	1260
atgttttttt	tcctgccctg	gggagaccct	gaaaacagaa	aggctagttt	cctggggggt	1320
agctccttca	aacatctctc	agttggtata	ttatctttct	aaaacataga	cctactgaca	1380
tgccctccct	cctcagaaac	cttcctgtgg	tggttcttac	agccttcaag	atggagtcca	1440
gactcttttt	tttttttggg	acagagtctc	cctctgttgc	tcaggctgga	gtgcagtggc	1500
atgatctcgg	ctcactgcaa	cctcagcctc	cctggttcaa	gcgattctcc	tgacttggcc	1560
tcccaagtag	cggagactac	aggcgccctg	caccacaccc	agctaaattt	gttcttttct	1620
ttcttttttt	tttttttggg	gatttttagga	cagacggggg	ttcacatgtt	ggccaggatg	1680
gtctcgatct	cttgacctgc	tgatccgccc	gcctcagctt	cccaaagtac	tgggattatg	1740
ggcgtgagcc	actgcactag	gcctaatttt	tttattttta	gtagagatgg	ggtttcacca	1800
tgttggccag	gctggtctgg	aacccttgac	ctcaagtggg	ctgccctcct	cagcctccca	1860
aagttctgag	attacaggca	tgagccattg	cgtctgaccc	agactcctta	atgtgactaa	1920
ctccaggctt	tccttggact	acttcttact	tgtctttcca	gctttgtctt	ttcacctctc	1980
caattgagat	aaaataataa	caacctcttg	gagttctcat	caggattaca	tgaaatgaga	2040
tatgtaacat	gcttagcagt	gcctgtccat	agtaaactct	aataaatggt	tgtggaatta	2100
taatatcttg	tcatgtttga	gactttgctc	tgcataatca	ggcaccagta	ggtttttata	2160
aaggaacccg	tctgtcacgt	gcagaggaga	aataaacaga	aagtttccca	tcctcaggga	2220
gccacctgac	tgacagaggc	acagtgcctc	cactctccag	gtctagggga	gaaagcagcc	2280
ttatttctta	gtagctcaga	atctgacttg	agaaacacat	ccacatagaa	aaaaacaagg	2340

aactttttcg	ggtcagggtc	cgggacccac	agtgaggtgg	aagatacagg	ggaaggaaga	2400
gggaaataga	gccatcccca	gggtggaaga	tctcagaaga	gaatttgga	aacaaggtat	2460
gaacaaggac	tgaatagtga	gaagtgatgg	agagacagct	aaagtagatg	gagtgtcaaa	2520
acaaaaacct	ctaagggtag	aataggcagc	aatttggcc	agtcctaaca	gggaggccca	2580
taggaggatt	caacctcaag	atgctgtgcc	acattccaag	agggaacct	aaggctgggc	2640
tgaagagtca	gagatggcta	cagctggcaa	aaagatgggc	agatgctgag	aggagatgat	2700
tgctaaaatg	ttctgtccag	gacattcaca	gtatctctat	aaccagagtc	ttttttgtcg	2760
ttgttgttct	caagaaggaa	acttgaggcc	gggtgtgggtg	gtttatgcc	ataatcccag	2820
cgttttgggg	ccaaggcagg	cggatcacct	gaggtcagga	gttcgagacc	agcctggcca	2880
acagtgtgaa	acctcatctt	tactaaaaat	acaaaaatta	gctggatgcg	gcggtaggtg	2940
cctgtaatgc	cagctactcg	ggaggctgag	gcaggagaat	cacttgaacc	tgggaggcgg	3000
aggttgacag	gaggcggagg	ttgcagtga	ccaagattgc	accactgcac	tccagcctgg	3060
gcgacagaga	gtaagactgt	ctcaaaaaat	aaatgaataa	ataaaaagga	agaagaagaa	3120
gaagaacaat	tgcaatcctc	cctggctcta	gaatgtcatt	taaaagtcga	gtgtcttctt	3180
ccttcctgtg	tttgaagcag	cccttctcat	gacaggcttg	cttgccaagg	ttcctctga	3240
ccttaaatct	cttccttttg	gtgtcttgga	cagggcagtt	cagagtgaata	ggaccaagac	3300
accctatccg	ggctctgggc	ggggatgaag	tggaattgcc	atgtcgcata	tctcctggga	3360
agaacgctac	aggcatggag	gtgggggtgt	accgcccccc	cttctctagg	gtggttcatc	3420
tctacagaaa	tggcaaggac	caagatggag	accaggcacc	tgaatatcgg	ggccggacag	3480
agctgctgaa	agatgctatt	ggtgagggaa	aggtgactct	caggatccgg	aatgtaaggt	3540
tctcagatga	aggaggtttc	acctgcttct	tccgagatca	ttcttaccaa	gaggaggcag	3600
caatggaatt	gaaagtagaa	ggtgagtagt	gccatataat	attaggtatt	aactgttggg	3660
tggccaagaa	caattattct	ctcaactgag	atgagatccc	tcaacccaaa	catctcagtc	3720
ctgggaatga	tttcataaaa	aatgtacaca	tcaataaaca	gaaactcatg	cttagggatg	3780
tctgttgcat	cattattcag	agtagcaagg	aaattgggat	caaatcaat	gcctttgagt	3840
aggtaagtga	cagaatgaac	aatggtagcc	atactgtgaa	tattatgcag	ggattaaaaa	3900
gattatttta	gcactaggcc	agatggtttg	gggggctcct	ctaaggtatt	attgagtgat	3960
aagagcaagc	tgctgtagga	tacaaaaaca	aaaacaaaac	cctagggcat	ggtggtttgc	4020
ctcgagctta	ctcaggaggc	tgagacggga	ggctggcttg	agcccagggg	tttgagttta	4080

cagtgcgcta	tgattgcacc	actgcactcc	aaccggggtg	acagagcaaa	gaccttcacc	4140
cccactccct	acccgtctct	aaaaaaaaa	aaaacaaaa	caaaaaaac	cttgggcca	4200
gcgccgtggc	tcacgcctgt	aatcccagca	ctgtgggagg	ccgaggtggg	cagatcacia	4260
ggtcaggaga	tcgagaccat	cctgggctaaa	acgggtgaaac	cccgtctcta	ctaaaaatac	4320
aaaaaaaaa	aaaaaattha	gccaggcatg	gtagcaggcg	cctgtagtcc	cagctactcg	4380
ggaggctgag	gcaggagaat	ggcgtgaacc	cggaagcgga	ggttgccagt	agccaaaatc	4440
cttcactgca	actccagcat	gggggacaca	gcgagactcc	gtctcaaaaa	aaaaaaaaaa	4500
accctgtatt	tgtgagcgca	cacacacaca	cacacacaca	cacacctgtg	cttggtccta	4560
gtgaataagc	aagtaaatca	aatgtctaaa	tataattata	gaaaggagat	gtcacctttt	4620
ggctgtacct	ccactatttc	attctgcaga	attgcagaat	ttcttttttt	tttcttttct	4680
ttcttttctt	tttttttttg	acacagagtc	tcgctctgta	acccaggctg	gagtgcattg	4740
gcgccctccg	cctcctgggt	tcaagtgatt	ctcctgcctc	agcctcccga	gtagctggga	4800
ttacagggtgc	ccaccaccac	accagctaa	tttttgtatt	tttagtagag	acagggtttc	4860
accaggttgt	caaggttggg	ctcaaaactc	tgacctcagg	tgatccactc	gcctcagact	4920
cccaaagtgc	tgaggattaca	ggcatgagcc	atgggtgccc	gcctcagaat	ttcattttca	4980
acatgttttg	catgatgggt	gattttggag	aatatttttt	gctctatcgc	aggatgatta	5040
agatgtggac	aaggtgaagc	cgatggaggg	ggagctttga	aagttacttg	ctatttaatt	5100
gaggaaactaa	actgccttga	gagcctgggg	gtcagatcct	ctgccttttc	ctcctcccca	5160
cctgcagtgc	aaacatcaga	caattgatca	ctattgtatc	ttggagggtg	gagtgaccat	5220
tgcagtgtcg	ggaccagaag	atggcattgt	atgtggaaca	acaaagcact	atttctagag	5280
actgcctgca	gggatatgga	aatagcttta	tgtgtctcag	aatgttcttc	atacagctgt	5340
ttttattggg	gaaattctac	ttgcgaaaa	gtttgatagt	gagaccctct	ccagtttgca	5400
gatttttctc	cttcctgctc	aacaacttcc	tagctcagta	actgcctctc	ccaacaaact	5460
ccctcagttt	caccacacca	aaaaggaag	acaagccggg	tgccgtggct	cacacctata	5520
atcccaaaac	tttgggaggc	cgaggcgggt	ggatccacct	gaggtcggga	gttcgagact	5580
agcctgacca	acatggagaa	accctgtctc	tactaaaaac	acaaaattag	cctggcgtgg	5640
tggcgcattc	ctgtaatccc	agctgggagg	ctgaggcagg	agaatcgctt	gaaccccgga	5700
ggcggagggt	gcagtgcgcc	aagatcgctc	cattacactc	cagtctgggc	aagaaaagtg	5760
gaactccatc	tccaaaaaaa	aaaaaaaaaa	aacaaggaag	acaaaaagaa	aagcagctaa	5820

ttgatttact	ttggcaaata	tagttcatca	gtgatactct	atacttcttg	ttgctttaca	7620
tccggaggct	gataatgtct	gcttttctct	cttttctaata	tatttgatga	aggaaaaatg	7680
tgggggggtg	ggagaaaaaa	acccttaagt	acatactcgc	taaatcacat	tgctacaggt	7740
aacttccatt	aagaacttga	aagtaaaggt	agctgcattt	tcccctaggg	aacacaatga	7800
tagacaggag	ccttagtcta	cagcttgaag	gattgtaatt	atacctaagc	aaccctcctg	7860
gaccagttta	atgttattag	ctgtgatgta	tccctacctt	tgatgtcatt	atccttactt	7920
agctccctta	aagcagagat	caagatgaaa	agggcttcag	ctgcagcatg	gcacatggag	7980
attagagtgg	ggcttttggg	tgctgaggag	cagacctaga	atgggaaata	gatgggagcc	8040
acagaagtga	aggccccctt	ccctcattgc	tcaacctact	ccacatctcc	aggtctgcac	8100
atctgttcag	ttactgaatc	ctgtgtaagc	taccttcttt	ttcttttttc	ttttatttat	8160
ttatttattt	tttttttgag	atggagtttt	gctcttggtt	cccaggctgg	agtgcaatgg	8220
tgcaatctcg	gctcactgca	ccctccaact	cccagggttc	tgcaattctc	ctccctcagc	8280
cttccaagta	gctgggatta	caggctgcac	caccatgtct	ggctaatttt	tgaaaaatca	8340
gtagagagag	ggtttcacca	tgttgggcaa	gcgggtctcg	aactcctgac	ctcaagtgat	8400
ccaccacact	tggcctccca	aaatgctggg	attacagggt	tgagccacca	tgcccgtgtt	8460
aaactacctt	cttaaaaagct	ctagaagagg	gcttttaacc	ttttgttggt	tgtcatgcac	8520
cttccgcaag	ctgatgaagt	tgatagaccc	atctcagaat	tttttttttt	tttttgagac	8580
agtgtctcac	tctgtcacc	aggattgggt	gcagtggcac	gatcatgggt	cattgcagcc	8640
tccacctccc	aggctcaagt	gacccctctg	actcagcctc	ttgaatagct	gagaccacag	8700
gcttgtgtca	ccatgcccag	gtaattttta	attttttttc	gtagaggcag	ggtctcacat	8760
tatgttgccc	agtctggcct	cgagaactcc	tgggctcaag	caatcttcct	gccttgggct	8820
cccaaagtgg	tgggattaca	ggggagagcc	accacaccta	gccaggagga	tgttttaaat	8880
acaccaaata	aaacatttat	acccaaatac	agttatccaa	atattaaatt	aacaagagtt	8940
agggtgaccc	tattaattag	tgtaatttcc	aaatagtaat	gaacataagt	gatagtttga	9000
gatttctgtg	acttttctaa	tgtgaogtga	aaatatttgt	gatttttctt	tttctttttt	9060
ttttttgaga	tggagtctcg	ctcttggtgc	ccaggctgga	gtgcaatggc	aagatctcgg	9120
ctcacctcaa	cctccgcctc	ctgggttcaa	gcgattctcc	tgccctcagc	tcttgagtag	9180
ctgggattac	aggactgtgc	caccacgtcc	agctaatttt	gtatttttag	tagaaacagg	9240
gtttctccat	gttggtcagg	ctggctctga	actcccaacc	tcaggcgatc	cgcccgcctc	9300

ggctcccaa agtgctggga ttacaggtgt gagccaccgc acctggccaa tatttgatgat 9360
 ttttattgac gacaaagtca aagggtctct tcatattatt gtggtgtatc gcctacaagc 9420
 ataattaaaa taaacactaa atttcagttt aaagtttact gaaaataaat atgtattttt 9480
 tattccctat ttaagctttg aatccccctga ctccctatac cattaccact gtcctagttc 9540
 aggttcatgt tgttttttac ttttaattgtt atcacagtct cttaacattt ctccctatgt 9600
 tctccagtcc tgtaggtgct aaatctgacg tggtcacttc tcagcttgga atccttcagt 9660
 gcaccaccac agccttgaac tacatatttg aaatacatat ttattttcag taaacttta 9720
 actgaaattt agtggtttatt ttaattatgc ttgtaggcga tacaccacaa taatatgaag 9780
 agaacctttg actttgtcgt caataaaaag tcccttgagg ggacttcaga tgtaagtccc 9840
 ttagctgctc gttaaaaactc cccaggtcg acccaataca caatcttgac tttaaaccac 9900
 ttgtcattct aaatcactag catttcctgg aaaaaaagc catttttctc tcagggctaa 9960
 gctcaggac caattctgtg tcaccttctt tgaatcctga tgatattcac ttctttattt 10020
 gacctgattt attgggccc agacaccatg ctgagtgttg gggattcagc tctggacaat 10080
 gtcaaatgtc agtcctgcct ttcagatcct ttctactggg tgagccctgg agtgctgggt 10140
 ctctctcggg tgctgcctgt gctcctctg cagatcactc ttggcctcgt ctctctctgc 10200
 ctgcagtaca gactgagagg tacagggcag aggggtgggtg gatcaggatc ctttcttta 10260
 atgagctggc ttcttgagc tacaccactt aacatgtatt tgtgagtga cttctgggttc 10320
 agaagttctt ctactattg agtgataaag aaaaaaata actccatgat gaaagagttt 10380
 tacatcttac ggaatgctt catatgaata atcggacctg gcatttccct atgagctaac 10440
 tatgccatat agtaaccca ttttacagag gatacaactg aggccaggag tagttcagt 10500
 acttactcaa accgatataa ctataaagt gtagagctga ggctctgta tcatacctag 10560
 cagctccatg caacttggga gagtgtgagc ttcgaagtca gacaggtcta ggctattagg 10620
 agttttgaat aaagatactg aagtgaagc ctctaccaca cagtaggcgt tcgaaaattg 10680
 tttctcttt ctccattcaa cactgaggac tcaggttcag ctgctgatga agctcctctt 10740
 ttttgctag agctttcatt ctgagcctt tctcctacc aagtgtctcc ccaatgccag 10800
 agcaggaaga gtcttcactc ctccaatgc cccacctcc atttgttact aagaggagag 10860
 gagaaagtag caaggagggt atggggaatg ttctggggga atgggtgttg gtgcgatcaa 10920
 caacaaagtc ctttctctca cttgaattc atcccagatg cctgcttgtt tacttcttcc 10980
 acacaaaaaa aggccttcag cctcatggc tgagcagaaa gaatctgaat gttagagtca 11040

ggcagcctg	ggttgaa	catctcagg	actgaactct	atagcaaaat	tcttagat	11100
tccaagct	agttgcct	tctgtcaa	agagaaaa	tccttcgt	taaattgt	11160
ggaggatt	agtcatg	agtgcc	acaaatcc	tcacaaag	gctagct	11220
cactaaat	tcagctc	cctcctc	cagatggg	gtggcttt	ataaaca	11280
tggcaac	gtgggct	gcagctc	gaactgag	tccaagaaa	ggggcga	11340
gcagctgg	tgtattg	gcttgtg	gcttggag	ttgctcac	tctttatt	11400
ctattgt	tagactat	ctagagaa	agccgca	attggctt	aatccag	11460
tcttcct	ctcctg	tgtttcc	ctgcagag	atagcctg	caagggg	11520
aggcgct	tgtggg	tccccac	gagccaga	atgcagg	taaaatg	11580
ccttttt	ttttagg	acttcg	gagatagg	agttcc	atcgttt	11640
ccaattc	ccttttg	ttttgg	acggaa	tccattc	ggaccgt	11700
tccctct	taccctg	tcccctc	ttccctt	ctacagt	tgtgtcg	11760
ctagaac	ttttaag	ttaaata	aagactc	ataaaag	ccttttt	11820
gtgccct	aaatcc	ccatttg	ctctttc	gaatctc	cggactt	11880
gtaagtt	gcatgt	gccctcc	gtcaact	tatttc	tagttcc	11940
cacctgg	aacaagg	cctggct	ggttgag	cttcctc	tctcttt	12000
ttcttta	aagaagt	ttgcatt	gattgg	atcata	aaatact	12060
gtactgt	tatgtg	gcactat	aactact	caaaaac	atcttat	12120
gtttaac	ttatgc	gatctc	ttcagga	ccaaaac	ggtaa	12180
tcgttt	gtaaac	tgtctg	gggagg	acaaac	acaagac	12240
actgtat	ctgtact	atttctg	tacaaac	ggatgtt	atgagt	12300
aacatg	atcagag	acctcat	ggaatag	agccacca	cccact	12360
aattgac	tcaagg	ggtttct	ctttttg	actgcag	gccaatg	12420
taaagata	ggcaac	gagcacc	atatatt	gataaat	gcagac	12480
gaaggtg	ttaggg	gatggt	tctctg	aacttc	acagct	12540
ctcccg	tgtagg	tctact	tcacct	cacagag	tatcgt	12600
tttagg	tagacc	tgtggac	acacac	atcttt	acccaag	12660
gaggaat	atcttt	tggagg	gactatg	ggtctta	ccttttt	12720
ccatga	ctctgg	ccagtga	ctaaagg	cctttgc	atgtttt	12780

atatacacat aaaatagaac acataggatt gcaaaaacaa tcattgtact aaaatacagt 12840
tatcaaccga taatcacatt tgtgatatag taacataaat gtttcttttt tttttttttg 12900
gaggcagagt ttggtctttg tcaccaggc tggagtgcaa tggcgcgatc taggctcact 12960
gaaacctctg cctcccggt tcaagcgatt ctccagcctcc tgagtagctg ggattacagg 13020
tgcccgccac cacaccagc taatttttgt attttttagta gagactaggt ttcaccagg 13080
tggccaggct ggcctcgaac tcctgacctc aggtgatcca cctgccttgg cctcccaaag 13140
tgctgggatt acgggcatga gccaccgtgc ccggccataa atatttcttt agccaaagta 13200
atacattaag taatgtagca gcaagtctaa taacctgtaa tttctttctt tctttctttc 13260
tttctttttt tttgagatga agtttttttg agatggagtg caatggcaca atctcggtc 13320
actgcaacct ccacctctg ggttcaagcg attctcctgc ctccagcctcc caagttgctg 13380
gaactacagg cgcattgccac catgccagc taatttttgt attttttagta gagacgggg 13440
ttcaccatgt tggccaggct ggtcttgaac ccctgacctc aggtgatctg cctgccttgg 13500
ccttccaaag tgctgggatt acaggcatga gccaccaggc ccagcccaat aacctttaat 13560
ttcaacatac taataaacat aaacagtatt tcaagatttc tgcaataact ctaatgggaa 13620
tgaaaacatc tgtggcttcc attggtaatt aagtcacagg tactgctcat attgtgggta 13680
gttgtaaaat gttttgggtt gttttgtttt ttccaagact tgggggaatg ggtgttggtg 13740
ggatcaacaa gagtcttgct ctgtggccca ggctggagtg caggggcagg atcttggtc 13800
actgcaacct ccgcctccca ggttcaagcg attctcctgc ctccagcctcc tgagtagctg 13860
gcattacagg catgtgccac cagcccagc taatttttac attttttagta gagatgggg 13920
ttcaccatgt tggcctggct ggtcttgaac tcttggcctc atgatccacc cgtctcgga 13980
tcccagagtg ttgggattac aggcattgagc caccacacct ggagttgtt acatttttaa 14040
tgaaagaaaa tgttaaatec agttattgaa aataaggagg cagtactttt ctcatccaag 14100
ttcatggact ttctgaattt tgtccccaga gtccttttgt gttctaggac ccaggttaa 14160
ggaacccaaa aagacagggtg ggtggggcat gagggggaac acatgttaat ccctgtttgt 14220
tctggtgaac aattcagatc ccactttct gaggggtgcc tgctggaaga taaccctgtt 14280
tgtaattgtg ccggttcttg gacccttggg tgccttgatc atctgctaca actggctaca 14340
togaagacta gcagggtgag tggctgggca gcaggcaaga ccaccaaata gtgggggacc 14400
aagtcagctc tgaatgggaa gccaaaagag aatagaacca ggactcaaga ttaggggagc 14460
tgggatttcc ttattcctct gtcccatgc ccaaccccag gctcttctga gaaactgtga 14520

agagaaccac ttactggatc tgtgggatcc ccagtggaaggcagggtgt gggtcactcc 14580
 aaatgtccat agggaggatg tggggaaggt gctattcatc ttccactaat cacatatttg 14640
 tttctttttg ttttcagggc aattccttga agagctacgt aagttctctt ctctctgtta 14700
 taagcagaga ataaaaagcc aggaaaggga gacagaagca acaaggaggaa gaggcggggt 14760
 attgagggat cacattccca gaggaaggga ggagctggag agcctgggtg gaggaagac 14820
 tcctcctggg aggtagaggg caaagaagcc agctgttaga gacacattta cagggtggcag 14880
 agaagctgga ggcactccta tctgccacct gatccattcc tccttcaactg cccctaagca 14940
 ggaatccaac cctagctggt ctcatcgccc attccacagc aactgcccag tgcctcacct 15000
 ctcatgatcaa ccattgaggc aggaatggag acaagatgac cccaagggtt tttcttctcc 15060
 ctagttcaat ggttttatga taaaaactac tgacatacgt ttttcaagtt attttctcct 15120
 tcttctagga aatcccttct gagtgatgtc acatcttggc aggggtggag gagagcctgg 15180
 ttgccagggt atttgcctt ggggacatct catccatcaa gttgcacact cactggcatc 15240
 tttgctatgg ggacattcca atttgcactt tcaggaacac tctgaattcc aagtagaatt 15300
 gatttccctt cttctgtcat ctaccttttc tcttcatttt cccattttta ttacccttct 15360
 ttccatttct ctctccagtc ttccacctgg aagccctctc tggctaagga caggcagggtg 15420
 cccctctctc catcagagga cacctgtact ggagagcaac acaggatggt ctctgccatg 15480
 aactggaggc caggaatctc ctactgaaa attacagtat ggtaactttg caaatgggtg 15540
 ttgtttcttc caagactcca gccctgattg cgcaaaactg aaaggcatgt gaagggaagg 15600
 aagaggaaga gtgcaaaaca ttgaagagag agctgagtga gctgaagagt gaggatatga 15660
 gtagcccaa cccaaacctg gagatgggga gaaacctaca gaatactagc cagagctcct 15720
 ccttgtcttg gcagcctact agggacctgg ggaagcaaaa acgaaagctg ggcaacatgc 15780
 ctgctttaga atgttttctt tctacttaca catcttccac aggtctcaga atctttcctt 15840
 cctctcatcc ttttctccta tctacatata tatcagagta tccactgttt attcaacaac 15900
 tactacttga tggtcagaca caaacaaca agctagggtgc taattaataa agatacgagt 15960
 tttggccggg tgcggtggct cacgcctgta atcccagcac tttgggaggc cgaggcgggc 16020
 gaatcacgag gtcaggagtt caagaccagc ctggccaaca tggtgaaacc ccatctctac 16080
 taaaaataca aacaattaac tgagcatagt ggtgggcacc tataatacca gctactccgg 16140
 aggctgaggc aggagaatcg cttgaacca ggaggcagag gttgcagtga gctgagatcg 16200
 cgccactgca ctctagccgg agtgacagag taagactctg tctcaaaaat aaataaataa 16260

tgtcattggt tgggaaaatg gctaggacat ccgacaagg tgatcatcct caggattttg 300
 tggcaataac aaggggtggg gggacaa 327

<210> 11
 <211> 2013
 <212> DNA
 <213> Rattus norvegicus

<400> 11
 ctgtatcagt gctcctcgtc gcctcactgt acttcacgga agagacttgg ttgactggcc 60
 acttgagcgg gaatcaggag acattcccaa ctcagagaga ctgagcccta gctcgccac 120
 ttgctggaca agatgatatt ccttaccacc ctgcctctgt tttggataat gatttcagct 180
 tctcgagggg ggcactgggg tgcttgatg ccctcgcca tctcagcctt cgagggcacg 240
 tgtgtctcca tccctgccc tttcgacttc ccgatgagc tcagaccggc tgtggtacat 300
 ggcgtctggt atttcaacag tccctacccc aagaactacc cgccagtggc cttcaagtcc 360
 cgcacacaag tgggtccacga gagcttccag ggccgtagcc gcctgttggg agacctgggc 420
 ctacgaaact gcacctgct tctcagcacg ctgagccctg agctgggagg gaaatactat 480
 ttccgaggtg acctgggcgg ctacaaccag tacaccttct cggagcacag cgtcctggac 540
 atcatcaaca cccccaacat cgtggtgccc ccagaagtgg tggcaggaac ggaagtagag 600
 gtcagctgca tgggtgccga caactgccc gagctgcgc ctgagctgag ctggctgggc 660
 cacgaggggc taggggagcc cactgttctg ggtcggtgc gggaggatga aggcacctgg 720
 gtgcaggtgt cactgctaca ctctgtgct actagagagg ccaacggcca ccgtctgggc 780
 tgtcaggctg ccttcccaa caccaccttg cagttcgagg gttacgccag tctggacgtc 840
 aagtaccccc cggtgattgt ggagatgaat tcctctgtgg aggccattga gggctccac 900
 gtcagcctgc tctgtggggc tgacagcaac ccgccaccgc tgctgacttg gatgcgggat 960
 gggatggtgt tgagggaggc agttgctgag agcctgtacc tggatctgga ggaggtgacc 1020
 ccagcagagg acggcatcta tgcttgctg gcagagaatg cctatggcca ggacaaccgc 1080
 acggtggagc tgagcgtcat gtatgcacct tggaagccca cagtgaatgg gacgggtgtg 1140
 gcggtagagg gggagacagt ctccatcctg tgttccacac agagcaaccc ggacctatt 1200
 ctcaccatct tcaaggagaa gcagatcctg gccacgggtca tctatgagag tcagctgcag 1260
 ctggaactcc ctgcagtgc gcccgaggac gatggggagt actggtgtgt agctgagaac 1320
 cagtatggcc agagagccac cgccttcaac ctgtctgtgg agtttgcctc cataatcctt 1380

ctggaatcgc actgtgcagc ggccagagac accgtgcagt gcctgtgtgt ggtaaaatcc 1440
 aacccggaac cctccgtggc ctttgagctg ccttcccgca acgtgactgt gaacgagaca 1500
 gagagggagt ttgtgtactc agagcgcagc ggccctcctgc tcaccagcat cctcacgctc 1560
 cgggggtcagg cccaagcccc accccgcgtc atttgtacct ccaggaacct ctacggcacc 1620
 cagagcctcg agctgccttt ccagggagca caccgactga tgtgggccaa aatcggcctc 1680
 gtgggtgctg tggtcgcctt tgccatcctg attgccattg tctgctacat caccagaca 1740
 agaagaaaaa agaacgtcac agagagcccc agcttctcag cgggagacaa cctcatgtc 1800
 ctgtacagcc ccgaattccg aatctctgga gcacctgata agtatgagag tgagaagcgc 1860
 ctgggggtccg agaggaggct gctgggcctt aggggggaac cccagaact ggacctcagt 1920
 tattcccact cagacctggg gaaacgaccc accaaggaca gctacaccct gacagaggag 1980
 ctggctgagt acgcagaaat ccgagtcaag tga 2013

<210> 12
 <211> 171
 <212> PRT
 <213> Homo sapiens

<400> 12

Met Ala Ser Gln Lys Arg Pro Ser Gln Arg His Gly Ser Lys Tyr Leu
 1 5 10 15

Ala Thr Ala Ser Thr Met Asp His Ala Arg His Gly Phe Leu Pro Arg
 20 25 30

His Arg Asp Thr Gly Ile Leu Asp Ser Ile Gly Arg Phe Phe Gly Gly
 35 40 45

Asp Arg Gly Ala Pro Lys Arg Gly Ser Gly Lys Asp Ser His His Pro
 50 55 60

Ala Arg Thr Ala His Tyr Gly Ser Leu Pro Gln Lys Ser His Gly Arg
 65 70 75 80

Thr Gln Asp Glu Asn Pro Val Val His Phe Phe Lys Asn Ile Val Thr
 85 90 95

Pro Arg Thr Pro Pro Pro Ser Gln Gly Lys Gly Arg Gly Leu Ser Leu
 100 105 110

Ser Arg Phe Ser Trp Gly Ala Glu Gly Gln Arg Pro Gly Phe Gly Tyr
115 120 125

Gly Gly Arg Ala Ser Asp Tyr Lys Ser Ala His Lys Gly Phe Lys Gly
130 135 140

Val Asp Ala Gln Gly Thr Leu Ser Lys Ile Phe Lys Leu Gly Gly Arg
145 150 155 160

Asp Ser Arg Ser Gly Ser Pro Met Ala Arg Arg
165 170

<210> 13
<211> 274
<212> PRT
<213> Homo sapiens

<400> 13

Met Gly Leu Leu Glu Cys Cys Ala Arg Cys Leu Val Gly Ala Pro Phe
1 5 10 15

Ala Ser Leu Val Ala Thr Gly Leu Cys Phe Phe Gly Val Ala Leu Phe
20 25 30

Cys Gly Cys Gly His Glu Ala Leu Thr Gly Thr Glu Lys Leu Ile Glu
35 40 45

Thr Tyr Phe Ser Lys Asn Tyr Gln Asp Tyr Glu Tyr Leu Ile Asn Val
50 55 60

Ile His Ala Phe Gln Tyr Val Ile Tyr Gly Thr Ala Ser Phe Phe Phe
65 70 75 80

Leu Tyr Gly Ala Leu Leu Leu Ala Glu Gly Phe Tyr Thr Thr Gly Ala
85 90 95

Val Arg Gln Ile Phe Gly Asp Tyr Lys Thr Thr Ile Cys Gly Lys Gly
100 105 110

Leu Ser Ala Thr Val Thr Gly Gly Gln Lys Gly Arg Gly Ser Arg Gly
115 120 125

Gln His Gln Ala His Ser Leu Glu Arg Val Cys His Cys Leu Gly Lys
130 135 140

Glu Val Gly Trp Tyr Arg Pro Pro Phe Ser Arg Val Val His Leu Tyr
65 70 75 80

Arg Asn Gly Lys Asp Gln Asp Gly Asp Gln Ala Pro Glu Tyr Arg Gly
85 90 95

Arg Thr Glu Leu Leu Lys Asp Ala Ile Gly Glu Gly Lys Val Thr Leu
100 105 110

Arg Ile Arg Asn Val Arg Phe Ser Asp Glu Gly Gly Phe Thr Cys Phe
115 120 125

Phe Arg Asp His Ser Tyr Gln Glu Glu Ala Ala Met Glu Leu Lys Val
130 135 140

Glu Asp Pro Phe Tyr Trp Val Ser Pro Gly Val Leu Val Leu Leu Ala
145 150 155 160

Val Leu Pro Val Leu Leu Leu Gln Ile Thr Leu Gly Leu Val Phe Leu
165 170 175

Cys Leu Gln Tyr Arg Leu Arg Gly Lys Leu Arg Ala Glu Ile Glu Asn
180 185 190

Leu His Arg Thr Phe Asp Pro His Phe Leu Arg Val Pro Cys Trp Lys
195 200 205

Ile Thr Leu Phe Val Ile Val Pro Val Leu Gly Pro Leu Val Ala Leu
210 215 220

Ile Ile Cys Tyr Asn Trp Leu His Arg Arg Leu Ala Gly Gln Phe Leu
225 230 235 240

Glu Glu Leu Arg Asn Pro Phe
245

<210> 15

<211> 18

<212> PRT

<213> Rattus norvegicus

<400> 15

Ala Pro Lys Arg Gly Ser Gly Lys Asp Ser His Thr Arg Thr Thr His

1 5 10 15

Tyr Gly

<210> 16
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 16

Val Leu Gly Gly Gly Cys Ala Leu Leu Arg Cys Pro Ala Leu Asp Ser
 1 5 10 15

Leu Thr Pro Ala Asn Glu Asp
 20

<210> 17
 <211> 4684
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> CDS
 <222> (253)..(3744)
 <223>

<400> 17
 attgctcgtc tgggcggcgg cggcggctgc agcctgggac agggcgggtg gcacatctcg 60
 atcgcggaagg caggagaagc agtctcattg ttccggggagc cgtcgccctct gcaggttctt 120
 cggctcggct cggcacgact cggcctgcct ggccccctgcc agtcttgccc aacccccaca 180
 accgcccgcg actctgagga gaagcggccc tgcggcggct gtagctgcag catcgtcggc 240
 gaccgcag cc atg gaa gac ata gac cag tcg tcg ctg gtc tcc tcg tcc 291
 Met Glu Asp Ile Asp Gln Ser Ser Leu Val Ser Ser Ser
 1 5 10
 acg gac agc ccg ccc cgg cct ccg ccc gcc ttc aag tac cag ttc gtg 339
 Thr Asp Ser Pro Pro Arg Pro Pro Pro Ala Phe Lys Tyr Gln Phe Val
 15 20 25
 acg gag ccc gag gac gag gag gac gag gag gag gag gag gac gag gag 387
 Thr Glu Pro Glu Asp Glu Glu Asp Glu Glu Glu Glu Glu Glu Asp Glu Glu
 30 35 40 45
 gag gac gac gag gac cta gag gaa ctg gag gtg ctg gag agg aag ccc 435
 Glu Asp Asp Glu Asp Leu Glu Glu Leu Glu Val Leu Glu Arg Lys Pro
 50 55 60

750	755	760	765	
tca cct cag gag cta gga aag cca tat tta gag tct ttt cag ccc aat				2595
Ser Pro Gln Glu Leu Gly Lys Pro Tyr Leu Glu Ser Phe Gln Pro Asn	770	775	780	
tta cat agt aca aaa gat gct gca tct aat gac att cca aca ttg acc				2643
Leu His Ser Thr Lys Asp Ala Ala Ser Asn Asp Ile Pro Thr Leu Thr	785	790	795	
aaa aag gag aaa att tct ttg caa atg gaa gag ttt aat act gca att				2691
Lys Lys Glu Lys Ile Ser Leu Gln Met Glu Glu Phe Asn Thr Ala Ile	800	805	810	
tat tca aat gat gac tta ctt tct tct aag gaa gac aaa ata aaa gaa				2739
Tyr Ser Asn Asp Asp Leu Leu Ser Ser Lys Glu Asp Lys Ile Lys Glu	815	820	825	
agt gaa aca ttt tca gat tca tct ccg att gag ata ata gat gaa ttt				2787
Ser Glu Thr Phe Ser Asp Ser Ser Pro Ile Glu Ile Ile Asp Glu Phe	830	835	840	845
ccc acg ttt gtc agt gct aaa gat gat tct cct aaa tta gcc aag gag				2835
Pro Thr Phe Val Ser Ala Lys Asp Asp Ser Pro Lys Leu Ala Lys Glu	850	855	860	
tac act gat cta gaa gta tcc gac aaa agt gaa att gct aat atc caa				2883
Tyr Thr Asp Leu Glu Val Ser Asp Lys Ser Glu Ile Ala Asn Ile Gln	865	870	875	
agc ggg gca gat tca ttg cct tgc tta gaa ttg ccc tgt gac ctt tct				2931
Ser Gly Ala Asp Ser Leu Pro Cys Leu Glu Leu Pro Cys Asp Leu Ser	880	885	890	
ttc aag aat ata tat cct aaa gat gaa gta cat gtt tca gat gaa ttc				2979
Phe Lys Asn Ile Tyr Pro Lys Asp Glu Val His Val Ser Asp Glu Phe	895	900	905	
tcc gaa aat agg tcc agt gta tct aag gca tcc ata tcg cct tca aat				3027
Ser Glu Asn Arg Ser Ser Val Ser Lys Ala Ser Ile Ser Pro Ser Asn	910	915	920	925
gtc tct gct ttg gaa cct cag aca gaa atg ggc agc ata gtt aaa tcc				3075
Val Ser Ala Leu Glu Pro Gln Thr Glu Met Gly Ser Ile Val Lys Ser	930	935	940	
aaa tca ctt acg aaa gaa gca gag aaa aaa ctt cct tct gac aca gag				3123
Lys Ser Leu Thr Lys Glu Ala Glu Lys Lys Leu Pro Ser Asp Thr Glu	945	950	955	
aaa gag gac aga tcc ctg tca gct gta ttg tca gca gag ctg agt aaa				3171
Lys Glu Asp Arg Ser Leu Ser Ala Val Leu Ser Ala Glu Leu Ser Lys	960	965	970	
act tca gtt gtt gac ctc ctc tac tgg aga gac att aag aag act gga				3219
Thr Ser Val Val Asp Leu Leu Tyr Trp Arg Asp Ile Lys Lys Thr Gly	975	980	985	

gtg	gtg	ttt	ggt	gcc	agc	tta	ttc	ctg	ctg	ctg	tct	ctg	aca	gtg	ttc	3267
Val	Val	Phe	Gly	Ala	Ser	Leu	Phe	Leu	Leu	Leu	Ser	Leu	Thr	Val	Phe	
990					995					1000					1005	
agc	att	gtc	agt	gta	acg	gcc	tac	att	gcc	ttg	gcc	ctg	ctc	tcg		3312
Ser	Ile	Val	Ser	Val	Thr	Ala	Tyr	Ile	Ala	Leu	Ala	Leu	Leu	Ser		
				1010					1015					1020		
gtg	act	atc	agc	ttt	agg	ata	tat	aag	ggc	gtg	atc	cag	gct	atc		3357
Val	Thr	Ile	Ser	Phe	Arg	Ile	Tyr	Lys	Gly	Val	Ile	Gln	Ala	Ile		
				1025					1030					1035		
cag	aaa	tca	gat	gaa	ggc	cac	cca	ttc	agg	gca	tat	tta	gaa	tct		3402
Gln	Lys	Ser	Asp	Glu	Gly	His	Pro	Phe	Arg	Ala	Tyr	Leu	Glu	Ser		
				1040					1045					1050		
gaa	gtt	gct	ata	tca	gag	gaa	ttg	gtt	cag	aaa	tac	agt	aat	tct		3447
Glu	Val	Ala	Ile	Ser	Glu	Glu	Leu	Val	Gln	Lys	Tyr	Ser	Asn	Ser		
				1055					1060					1065		
gct	ctt	ggt	cat	gtg	aac	agc	aca	ata	aaa	gaa	ctg	agg	cgg	ctt		3492
Ala	Leu	Gly	His	Val	Asn	Ser	Thr	Ile	Lys	Glu	Leu	Arg	Arg	Leu		
				1070					1075					1080		
ttc	tta	gtt	gat	gat	tta	gtt	gat	tcc	ctg	aag	ttt	gca	gtg	ttg		3537
Phe	Leu	Val	Asp	Asp	Leu	Val	Asp	Ser	Leu	Lys	Phe	Ala	Val	Leu		
				1085					1090					1095		
atg	tgg	gtg	ttt	act	tat	gtt	ggt	gcc	ttg	ttc	aat	ggt	ctg	aca		3582
Met	Trp	Val	Phe	Thr	Tyr	Val	Gly	Ala	Leu	Phe	Asn	Gly	Leu	Thr		
				1100					1105					1110		
cta	ctg	att	tta	gct	ctg	atc	tca	ctc	ttc	agt	att	cct	gtt	att		3627
Leu	Leu	Ile	Leu	Ala	Leu	Ile	Ser	Leu	Phe	Ser	Ile	Pro	Val	Ile		
				1115					1120					1125		
tat	gaa	cgg	cat	cag	gtg	cag	ata	gat	cat	tat	cta	gga	ctt	gca		3672
Tyr	Glu	Arg	His	Gln	Val	Gln	Ile	Asp	His	Tyr	Leu	Gly	Leu	Ala		
				1130					1135					1140		
aac	aag	agt	gtt	aag	gat	gcc	atg	gcc	aaa	atc	caa	gca	aaa	atc		3717
Asn	Lys	Ser	Val	Lys	Asp	Ala	Met	Ala	Lys	Ile	Gln	Ala	Lys	Ile		
				1145					1150					1155		
cct	gga	ttg	aag	cgc	aaa	gca	gat	tga	aaaagcccca	aacagaagtt						3764
Pro	Gly	Leu	Lys	Arg	Lys	Ala	Asp									
				1160												
catcttttaaa	ggggacactc	acttgattac	gggggtggga	gggtcagggg	tgagcccttg											3824
gtggccgtgc	ggtttcagct	ctttattttt	agcagtgcac	tgtttgagga	aaaattacct											3884
gtcttgactt	cctgtgttta	tcattcttaag	tattgtaagc	tgctgtgtat	ggatctcatt											3944
gtagtcacac	ttgtcttccc	caatgaggcg	cctggtgaat	aaaggactcg	gggaaagctg											

Asp Glu Gly His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala
1040 1045 1050

Ile Ser Glu Glu Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly
1055 1060 1065

His Val Asn Ser Thr Ile Lys Glu Leu Arg Arg Leu Phe Leu Val
1070 1075 1080

Asp Asp Leu Val Asp Ser Leu Lys Phe Ala Val Leu Met Trp Val
1085 1090 1095

Phe Thr Tyr Val Gly Ala Leu Phe Asn Gly Leu Thr Leu Leu Ile
1100 1105 1110

Leu Ala Leu Ile Ser Leu Phe Ser Ile Pro Val Ile Tyr Glu Arg
1115 1120 1125

His Gln Val Gln Ile Asp His Tyr Leu Gly Leu Ala Asn Lys Ser
1130 1135 1140

Val Lys Asp Ala Met Ala Lys Ile Gln Ala Lys Ile Pro Gly Leu
1145 1150 1155

Lys Arg Lys Ala Asp
1160

<210> 19
<211> 18
<212> PRT
<213> Rattus norvegicus

<400> 19

Ser Tyr Asp Ser Ile Lys Leu Glu Pro Glu Asn Pro Pro Pro Tyr Glu
1 5 10 15

Glu Ala

<210> 20
<211> 360
<212> PRT
<213> Rattus norvegicus

<400> 20

Met Glu Asp Ile Asp Gln Ser Ser Leu Val Ser Ser Ser Thr Asp Ser
1 5 10 15

Pro Pro Arg Pro Pro Pro Ala Phe Lys Tyr Gln Phe Val Thr Glu Pro
20 25 30

Glu Asp Glu Glu Asp Glu Glu Glu Glu Glu Asp Glu Glu Glu Asp Asp
35 40 45

Glu Asp Leu Glu Glu Leu Glu Val Leu Glu Arg Lys Pro Ala Ala Gly
50 55 60

Leu Ser Ala Ala Ala Val Pro Pro Ala Ala Ala Ala Pro Leu Leu Asp
65 70 75 80

Phe Ser Ser Asp Ser Val Pro Pro Ala Pro Arg Gly Pro Leu Pro Ala
85 90 95

Ala Pro Pro Ala Ala Pro Glu Arg Gln Pro Ser Trp Glu Arg Ser Pro
100 105 110

Ala Ala Pro Ala Pro Ser Leu Pro Pro Ala Ala Ala Val Leu Pro Ser
115 120 125

Lys Leu Pro Glu Asp Asp Glu Pro Pro Ala Arg Pro Pro Pro Pro Pro
130 135 140

Pro Ala Gly Ala Ser Pro Leu Ala Glu Pro Ala Ala Pro Pro Ser Thr
145 150 155 160

Pro Ala Ala Pro Lys Arg Arg Gly Ser Gly Ser Val Val Val Asp Leu
165 170 175

Leu Tyr Trp Arg Asp Ile Lys Lys Thr Gly Val Val Phe Gly Ala Ser
180 185 190

Leu Phe Leu Leu Leu Ser Leu Thr Val Phe Ser Ile Val Ser Val Thr
195 200 205

Ala Tyr Ile Ala Leu Ala Leu Leu Ser Val Thr Ile Ser Phe Arg Ile
210 215 220

Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly His Pro
225 230 235 240

Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu Leu Val
245 250 255

Gln Lys Tyr Ser Asn Ser Ala Leu Gly His Val Asn Ser Thr Ile Lys
260 265 270

Glu Leu Arg Arg Leu Phe Leu Val Asp Asp Leu Val Asp Ser Leu Lys
275 280 285

Phe Ala Val Leu Met Trp Val Phe Thr Tyr Val Gly Ala Leu Phe Asn
290 295 300

Gly Leu Thr Leu Leu Ile Leu Ala Leu Ile Ser Leu Phe Ser Ile Pro
305 310 315 320

Val Ile Tyr Glu Arg His Gln Val Gln Ile Asp His Tyr Leu Gly Leu
325 330 335

Ala Asn Lys Ser Val Lys Asp Ala Met Ala Lys Ile Gln Ala Lys Ile
340 345 350

Pro Gly Leu Lys Arg Lys Ala Asp
355 360

<210> 21
<211> 199
<212> PRT
<213> Rattus norvegicus

<400> 21

Met Asp Gly Gln Lys Lys His Trp Lys Asp Lys Val Val Asp Leu Leu
1 5 10 15

Tyr Trp Arg Asp Ile Lys Lys Thr Gly Val Val Phe Gly Ala Ser Leu
20 25 30

Phe Leu Leu Leu Ser Leu Thr Val Phe Ser Ile Val Ser Val Thr Ala
35 40 45

Tyr Ile Ala Leu Ala Leu Leu Ser Val Thr Ile Ser Phe Arg Ile Tyr
50 55 60

Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly His Pro Phe

65 70 75 80

Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu Leu Val Gln
 85 90 95

Lys Tyr Ser Asn Ser Ala Leu Gly His Val Asn Ser Thr Ile Lys Glu
 100 105 110

Leu Arg Arg Leu Phe Leu Val Asp Asp Leu Val Asp Ser Leu Lys Phe
 115 120 125

Ala Val Leu Met Trp Val Phe Thr Tyr Val Gly Ala Leu Phe Asn Gly
 130 135 140

Leu Thr Leu Leu Ile Leu Ala Leu Ile Ser Leu Phe Ser Ile Pro Val
 145 150 155 160

Ile Tyr Glu Arg His Gln Val Gln Ile Asp His Tyr Leu Gly Leu Ala
 165 170 175

Asn Lys Ser Val Lys Asp Ala Met Ala Lys Ile Gln Ala Lys Ile Pro
 180 185 190

Gly Leu Lys Arg Lys Ala Asp
 195

<210> 22
 <211> 3579
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(3579)
 <223>

<400> 22
 atg gaa gac ctg gac cag tct cct ctg gtc tcg tcc tcg gac agc cca 48
 Met Glu Asp Leu Asp Gln Ser Pro Leu Val Ser Ser Ser Asp Ser Pro
 1 5 10 15

ccc cgg ccg cag ccc gcg ttc aag tac cag ttc gtg agg gag ccc gag 96
 Pro Arg Pro Gln Pro Ala Phe Lys Tyr Gln Phe Val Arg Glu Pro Glu
 20 25 30

gac gag gag gaa gaa gag gag gag gaa gag gag gac gag gac gaa gac 144
 Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Asp Glu Asp Glu Asp
 35 40 45

ctg	gag	gag	ctg	gag	gtg	ctg	gag	agg	aag	ccc	gcc	gcc	ggg	ctg	tcc	192
Leu	Glu	Glu	Leu	Glu	Val	Leu	Glu	Arg	Lys	Pro	Ala	Ala	Gly	Leu	Ser	
50						55				60						
gcg	gcc	cca	gtg	ccc	acc	gcc	cct	gcc	gcc	ggc	gcg	ccc	ctg	atg	gac	240
Ala	Ala	Pro	Val	Pro	Thr	Ala	Pro	Ala	Ala	Gly	Ala	Pro	Leu	Met	Asp	
65				70					75					80		
ttc	gga	aat	gac	ttc	gtg	ccg	ccg	gcg	ccc	cgg	gga	ccc	ctg	ccg	gcc	288
Phe	Gly	Asn	Asp	Phe	Val	Pro	Pro	Ala	Pro	Arg	Gly	Pro	Leu	Pro	Ala	
			85						90					95		
gct	ccc	ccc	gtc	gcc	ccg	gag	cgg	cag	ccg	tct	tgg	gac	ccg	agc	ccg	336
Ala	Pro	Pro	Val	Ala	Pro	Glu	Arg	Gln	Pro	Ser	Trp	Asp	Pro	Ser	Pro	
			100					105					110			
gtg	tcg	tcg	acc	gtg	ccc	gcg	cca	tcc	ccg	ctg	tct	gct	gcc	gca	gtc	384
Val	Ser	Ser	Thr	Val	Pro	Ala	Pro	Ser	Pro	Leu	Ser	Ala	Ala	Ala	Val	
			115				120					125				
tcg	ccc	tcc	aag	ctc	cct	gag	gac	gac	gag	cct	ccg	gcc	cgg	cct	ccc	432
Ser	Pro	Ser	Lys	Leu	Pro	Glu	Asp	Asp	Glu	Pro	Pro	Ala	Arg	Pro	Pro	
	130					135				140						
cct	cct	ccc	ccg	gcc	agc	gtg	agc	ccc	cag	gca	gag	ccc	gtg	tgg	acc	480
Pro	Pro	Pro	Pro	Ala	Ser	Val	Ser	Pro	Gln	Ala	Glu	Pro	Val	Trp	Thr	
145				150					155						160	
ccg	cca	gcc	ccg	gct	ccc	gcc	gcg	ccc	ccc	tcc	acc	ccg	gcc	gcg	ccc	528
Pro	Pro	Ala	Pro	Ala	Pro	Ala	Ala	Pro	Pro	Ser	Thr	Pro	Ala	Ala	Pro	
				165					170					175		
aag	cgc	agg	ggc	tcc	tcg	ggc	tca	gtg	gat	gag	acc	ctt	ttt	gct	ctt	576
Lys	Arg	Arg	Gly	Ser	Ser	Gly	Ser	Val	Asp	Glu	Thr	Leu	Phe	Ala	Leu	
			180					185					190			
cct	gct	gca	tct	gag	cct	gtg	ata	cgc	tcc	tct	gca	gaa	aat	atg	gac	624
Pro	Ala	Ala	Ser	Glu	Pro	Val	Ile	Arg	Ser	Ser	Ala	Glu	Asn	Met	Asp	
		195					200					205				
ttg	aag	gag	cag	cca	ggt	aac	act	att	tcg	gct	ggt	caa	gag	gat	ttc	672
Leu	Lys	Glu	Gln	Pro	Gly	Asn	Thr	Ile	Ser	Ala	Gly	Gln	Glu	Asp	Phe	
	210					215					220					
cca	tct	gtc	ctg	ctt	gaa	act	gct	gct	tct	ctt	cct	tct	ctg	tct	cct	720
Pro	Ser	Val	Leu	Leu	Glu	Thr	Ala	Ala	Ser	Leu	Pro	Ser	Leu	Ser	Pro	
225				230					235						240	
ctc	tca	gcc	gct	tct	ttc	aaa	gaa	cat	gaa	tac	ctt	ggt	aat	ttg	tca	768
Leu	Ser	Ala	Ala	Ser	Phe	Lys	Glu	His	Glu	Tyr	Leu	Gly	Asn	Leu	Ser	

Asp	Ser	Ser	Pro	Asp	Ser	Glu	Pro	Val	Asp	Leu	Phe	Ser	Asp	Asp	Ser		
			740					745					750				
ata	cct	gac	gtt	cca	caa	aaa	caa	gat	gaa	act	gtg	atg	ctt	gtg	aaa	2304	
Ile	Pro	Asp	Val	Pro	Gln	Lys	Gln	Asp	Glu	Thr	Val	Met	Leu	Val	Lys		
		755					760					765					
gaa	agt	ctc	act	gag	act	tca	ttt	gag	tca	atg	ata	gaa	tat	gaa	aat	2352	
Glu	Ser	Leu	Thr	Glu	Thr	Ser	Phe	Glu	Ser	Met	Ile	Glu	Tyr	Glu	Asn		
	770					775					780						
aag	gaa	aaa	ctc	agt	gct	ttg	cca	cct	gag	gga	gga	aag	cca	tat	ttg	2400	
Lys	Glu	Lys	Leu	Ser	Ala	Leu	Pro	Pro	Glu	Gly	Gly	Lys	Pro	Tyr	Leu		
785					790					795					800		
gaa	tct	ttt	aag	ctc	agt	tta	gat	aac	aca	aaa	gat	acc	ctg	tta	cct	2448	
Glu	Ser	Phe	Lys	Leu	Ser	Leu	Asp	Asn	Thr	Lys	Asp	Thr	Leu	Leu	Pro		
			805						810					815			
gat	gaa	gtt	tca	aca	ttg	agc	aaa	aag	gag	aaa	att	cct	ttg	cag	atg	2496	
Asp	Glu	Val	Ser	Thr	Leu	Ser	Lys	Lys	Glu	Lys	Ile	Pro	Leu	Gln	Met		
			820					825					830				
gag	gag	ctc	agt	act	gca	gtt	tat	tca	aat	gat	gac	tta	ttt	att	tct	2544	
Glu	Glu	Leu	Ser	Thr	Ala	Val	Tyr	Ser	Asn	Asp	Asp	Leu	Phe	Ile	Ser		
		835					840					845					
aag	gaa	gca	cag	ata	aga	gaa	act	gaa	acg	ttt	tca	gat	tca	tct	cca	2592	
Lys	Glu	Ala	Gln	Ile	Arg	Glu	Thr	Glu	Thr	Phe	Ser	Asp	Ser	Ser	Pro		
		850					855				860						
att	gaa	att	ata	gat	gag	ttc	cct	aca	ttg	atc	agt	tct	aaa	act	gat	2640	
Ile	Glu	Ile	Ile	Asp	Glu	Phe	Pro	Thr	Leu	Ile	Ser	Ser	Lys	Thr	Asp		
865					870					875					880		
tca	ttt	tct	aaa	tta	gcc	agg	gaa	tat	act	gac	cta	gaa	gta	tcc	cac	2688	
Ser	Phe	Ser	Lys	Leu	Ala	Arg	Glu	Tyr	Thr	Asp	Leu	Glu	Val	Ser	His		
			885						890					895			
aaa	agt	gaa	att	gct	aat	gcc	ccg	gat	gga	gct	ggg	tca	ttg	cct	tgc	2736	
Lys	Ser	Glu	Ile	Ala	Asn	Ala	Pro	Asp	Gly	Ala	Gly	Ser	Leu	Pro	Cys		
			900					905					910				
aca	gaa	ttg	ccc	cat	gac	ctt	tct	ttg	aag	aac	ata	caa	ccc	aaa	gtt	2784	
Thr	Glu	Leu	Pro	His	Asp	Leu	Ser	Leu	Lys	Asn	Ile	Gln	Pro	Lys	Val		
		915					920					925					
gaa	gag	aaa	atc	agt	ttc	tca	gat	gac	ttt	tct	aaa	aat	ggg	tct	gct	2832	
Glu	Glu	Lys	Ile	Ser	Phe	Ser	Asp	Asp	Phe	Ser	Lys	Asn	Gly	Ser	Ala		
	930					935					940						
aca	tca	aag	gtg	ctc	tta	ttg	cct	cca	gat	gtt	tct	gct	ttg	gcc	act	2880	
Thr	Ser	Lys	Val	Leu	Leu	Leu	Pro	Pro	Asp	Val	Ser	Ala	Leu	Ala	Thr		
	945				950					955					960		
caa	gca	gag	ata	gag	agc	ata	gtt	aaa	ccc	aaa	gtt	ctt	gtg	aaa	gaa	2928	
Gln	Ala	Glu	Ile	Glu	Ser	Ile	Val	Lys	Pro	Lys	Val	Leu	Val	Lys	Glu		
				965					970					975			

gct gag aaa aaa ctt cct tcc gat aca gaa aaa gag gac aga tca cca	2976
Ala Glu Lys Lys Leu Pro Ser Asp Thr Glu Lys Glu Asp Arg Ser Pro	
980 985 990	
tct gct ata ttt tca gca gag ctg agt aaa act tca gtt gtt gac ctc	3024
Ser Ala Ile Phe Ser Ala Glu Leu Ser Lys Thr Ser Val Val Asp Leu	
995 1000 1005	
ctg tac tgg aga gac att aag aag act gga gtg gtg ttt ggt gcc	3069
Leu Tyr Trp Arg Asp Ile Lys Lys Thr Gly Val Val Phe Gly Ala	
1010 1015 1020	
agc cta ttc ctg ctg ctt tca ttg aca gta ttc agc att gtg agc	3114
Ser Leu Phe Leu Leu Leu Ser Leu Thr Val Phe Ser Ile Val Ser	
1025 1030 1035	
gta aca gcc tac att gcc ttg gcc ctg ctc tct gtg acc atc agc	3159
Val Thr Ala Tyr Ile Ala Leu Ala Leu Leu Ser Val Thr Ile Ser	
1040 1045 1050	
ttt agg ata tac aag ggt gtg atc caa gct atc cag aaa tca gat	3204
Phe Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp	
1055 1060 1065	
gaa ggc cac cca ttc agg gca tat ctg gaa tct gaa gtt gct ata	3249
Glu Gly His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile	
1070 1075 1080	
tct gag gag ttg gtt cag aag tac agt aat tct gct ctt ggt cat	3294
Ser Glu Glu Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His	
1085 1090 1095	
gtg aac tgc acg ata aag gaa ctc agg cgc ctc ttc tta gtt gat	3339
Val Asn Cys Thr Ile Lys Glu Leu Arg Arg Leu Phe Leu Val Asp	
1100 1105 1110	
gat tta gtt gat tct ctg aag ttt gca gtg ttg atg tgg gta ttt	3384
Asp Leu Val Asp Ser Leu Lys Phe Ala Val Leu Met Trp Val Phe	
1115 1120 1125	
acc tat gtt ggt gcc ttg ttt aat ggt ctg aca cta ctg att ttg	3429
Thr Tyr Val Gly Ala Leu Phe Asn Gly Leu Thr Leu Leu Ile Leu	
1130 1135 1140	
gct ctc att tca ctc ttc agt gtt cct gtt att tat gaa cgg cat	3474
Ala Leu Ile Ser Leu Phe Ser Val Pro Val Ile Tyr Glu Arg His	
1145 1150 1155	
cag gcg cag ata gat cat tat cta gga ctt gca aat aag aat gtt	3519
Gln Ala Gln Ile Asp His Tyr Leu Gly Leu Ala Asn Lys Asn Val	
1160 1165 1170	
aaa gat gct atg gct aaa atc caa gca aaa atc cct gga ttg aag	3564
Lys Asp Ala Met Ala Lys Ile Gln Ala Lys Ile Pro Gly Leu Lys	
1175 1180 1185	
cgc aaa gct gaa tga	3579

Arg Lys Ala Glu
1190

<210> 23
<211> 1192
<212> PRT
<213> Homo sapiens

<400> 23

Met Glu Asp Leu Asp Gln Ser Pro Leu Val Ser Ser Ser Asp Ser Pro
1 5 10 15

Pro Arg Pro Gln Pro Ala Phe Lys Tyr Gln Phe Val Arg Glu Pro Glu
20 25 30

Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Asp Glu Asp Glu Asp
35 40 45

Leu Glu Glu Leu Glu Val Leu Glu Arg Lys Pro Ala Ala Gly Leu Ser
50 55 60

Ala Ala Pro Val Pro Thr Ala Pro Ala Ala Gly Ala Pro Leu Met Asp
65 70 75 80

Phe Gly Asn Asp Phe Val Pro Pro Ala Pro Arg Gly Pro Leu Pro Ala
85 90 95

Ala Pro Pro Val Ala Pro Glu Arg Gln Pro Ser Trp Asp Pro Ser Pro
100 105 110

Val Ser Ser Thr Val Pro Ala Pro Ser Pro Leu Ser Ala Ala Val
115 120 125

Ser Pro Ser Lys Leu Pro Glu Asp Asp Glu Pro Pro Ala Arg Pro Pro
130 135 140

Pro Pro Pro Pro Ala Ser Val Ser Pro Gln Ala Glu Pro Val Trp Thr
145 150 155 160

Pro Pro Ala Pro Ala Pro Ala Ala Pro Pro Ser Thr Pro Ala Ala Pro
165 170 175

Lys Arg Arg Gly Ser Ser Gly Ser Val Asp Glu Thr Leu Phe Ala Leu
180 185 190

Pro Ala Ala Ser Glu Pro Val Ile Arg Ser Ser Ala Glu Asn Met Asp
 195 200 205

Leu Lys Glu Gln Pro Gly Asn Thr Ile Ser Ala Gly Gln Glu Asp Phe
 210 215 220

Pro Ser Val Leu Leu Glu Thr Ala Ala Ser Leu Pro Ser Leu Ser Pro
 225 230 235 240

Leu Ser Ala Ala Ser Phe Lys Glu His Glu Tyr Leu Gly Asn Leu Ser
 245 250 255

Thr Val Leu Pro Thr Glu Gly Thr Leu Gln Glu Asn Val Ser Glu Ala
 260 265 270

Ser Lys Glu Val Ser Glu Lys Ala Lys Thr Leu Leu Ile Asp Arg Asp
 275 280 285

Leu Thr Glu Phe Ser Glu Leu Glu Tyr Ser Glu Met Gly Ser Ser Phe
 290 295 300

Ser Val Ser Pro Lys Ala Glu Ser Ala Val Ile Val Ala Asn Pro Arg
 305 310 315 320

Glu Glu Ile Ile Val Lys Asn Lys Asp Glu Glu Glu Lys Leu Val Ser
 325 330 335

Asn Asn Ile Leu His Asn Gln Gln Glu Leu Pro Thr Ala Leu Thr Lys
 340 345 350

Leu Val Lys Glu Asp Glu Val Val Ser Ser Glu Lys Ala Lys Asp Ser
 355 360 365

Phe Asn Glu Lys Arg Val Ala Val Glu Ala Pro Met Arg Glu Glu Tyr
 370 375 380

Ala Asp Phe Lys Pro Phe Glu Arg Val Trp Glu Val Lys Asp Ser Lys
 385 390 395 400

Glu Asp Ser Asp Met Leu Ala Ala Gly Gly Lys Ile Glu Ser Asn Leu
 405 410 415

Glu Ser Lys Val Asp Lys Lys Cys Phe Ala Asp Ser Leu Glu Gln Thr

Pro	Pro	Tyr	Glu	Glu	Ala	Met	Ser	Val	Ser	Leu	Lys	Lys	Val	Ser	Gly	660	665	670	
Ile	Lys	Glu	Glu	Ile	Lys	Glu	Pro	Glu	Asn	Ile	Asn	Ala	Ala	Leu	Gln	675	680	685	
Glu	Thr	Glu	Ala	Pro	Tyr	Ile	Ser	Ile	Ala	Cys	Asp	Leu	Ile	Lys	Glu	690	695	700	
Thr	Lys	Leu	Ser	Ala	Glu	Pro	Ala	Pro	Asp	Phe	Ser	Asp	Tyr	Ser	Glu	705	710	715	720
Met	Ala	Lys	Val	Glu	Gln	Pro	Val	Pro	Asp	His	Ser	Glu	Leu	Val	Glu	725	730	735	
Asp	Ser	Ser	Pro	Asp	Ser	Glu	Pro	Val	Asp	Leu	Phe	Ser	Asp	Asp	Ser	740	745	750	
Ile	Pro	Asp	Val	Pro	Gln	Lys	Gln	Asp	Glu	Thr	Val	Met	Leu	Val	Lys	755	760	765	
Glu	Ser	Leu	Thr	Glu	Thr	Ser	Phe	Glu	Ser	Met	Ile	Glu	Tyr	Glu	Asn	770	775	780	
Lys	Glu	Lys	Leu	Ser	Ala	Leu	Pro	Pro	Glu	Gly	Gly	Lys	Pro	Tyr	Leu	785	790	795	800
Glu	Ser	Phe	Lys	Leu	Ser	Leu	Asp	Asn	Thr	Lys	Asp	Thr	Leu	Leu	Pro	805	810	815	
Asp	Glu	Val	Ser	Thr	Leu	Ser	Lys	Lys	Glu	Lys	Ile	Pro	Leu	Gln	Met	820	825	830	
Glu	Glu	Leu	Ser	Thr	Ala	Val	Tyr	Ser	Asn	Asp	Asp	Leu	Phe	Ile	Ser	835	840	845	
Lys	Glu	Ala	Gln	Ile	Arg	Glu	Thr	Glu	Thr	Phe	Ser	Asp	Ser	Ser	Pro	850	855	860	
Ile	Glu	Ile	Ile	Asp	Glu	Phe	Pro	Thr	Leu	Ile	Ser	Ser	Lys	Thr	Asp	865	870	875	880
Ser	Phe	Ser	Lys	Leu	Ala	Arg	Glu	Tyr	Thr	Asp	Leu	Glu	Val	Ser	His				

885

890

895

Lys Ser Glu Ile Ala Asn Ala Pro Asp Gly Ala Gly Ser Leu Pro Cys
900 905 910

Thr Glu Leu Pro His Asp Leu Ser Leu Lys Asn Ile Gln Pro Lys Val
915 920 925

Glu Glu Lys Ile Ser Phe Ser Asp Asp Phe Ser Lys Asn Gly Ser Ala
930 935 940

Thr Ser Lys Val Leu Leu Leu Pro Pro Asp Val Ser Ala Leu Ala Thr
945 950 955 960

Gln Ala Glu Ile Glu Ser Ile Val Lys Pro Lys Val Leu Val Lys Glu
965 970 975

Ala Glu Lys Lys Leu Pro Ser Asp Thr Glu Lys Glu Asp Arg Ser Pro
980 985 990

Ser Ala Ile Phe Ser Ala Glu Leu Ser Lys Thr Ser Val Val Asp Leu
995 1000 1005

Leu Tyr Trp Arg Asp Ile Lys Lys Thr Gly Val Val Phe Gly Ala
1010 1015 1020

Ser Leu Phe Leu Leu Leu Ser Leu Thr Val Phe Ser Ile Val Ser
1025 1030 1035

Val Thr Ala Tyr Ile Ala Leu Ala Leu Leu Ser Val Thr Ile Ser
1040 1045 1050

Phe Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp
1055 1060 1065

Glu Gly His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile
1070 1075 1080

Ser Glu Glu Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His
1085 1090 1095

Val Asn Cys Thr Ile Lys Glu Leu Arg Arg Leu Phe Leu Val Asp
1100 1105 1110

002290" 04E6350

Asp Leu Val Asp Ser Leu Lys Phe Ala Val Leu Met Trp Val Phe
1115 1120 1125

Thr Tyr Val Gly Ala Leu Phe Asn Gly Leu Thr Leu Leu Ile Leu
1130 1135 1140

Ala Leu Ile Ser Leu Phe Ser Val Pro Val Ile Tyr Glu Arg His
1145 1150 1155

Gln Ala Gln Ile Asp His Tyr Leu Gly Leu Ala Asn Lys Asn Val
1160 1165 1170

Lys Asp Ala Met Ala Lys Ile Gln Ala Lys Ile Pro Gly Leu Lys
1175 1180 1185

Arg Lys Ala Glu
1190

<210> 24
<211> 373
<212> PRT
<213> Homo sapiens

<400> 24

Met Glu Asp Leu Asp Gln Ser Pro Leu Val Ser Ser Ser Asp Ser Pro
1 5 10 15

Pro Arg Pro Gln Pro Ala Phe Lys Tyr Gln Phe Val Arg Glu Pro Glu
20 25 30

Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Asp Glu Asp Glu Asp
35 40 45

Leu Glu Glu Leu Glu Val Leu Glu Arg Lys Pro Ala Ala Gly Leu Ser
50 55 60

Ala Ala Pro Val Pro Thr Ala Pro Ala Ala Gly Ala Pro Leu Met Asp
65 70 75 80

Phe Gly Asn Asp Phe Val Pro Pro Ala Pro Arg Gly Pro Leu Pro Ala
85 90 95

Ala Pro Pro Val Ala Pro Glu Arg Gln Pro Ser Trp Asp Pro Ser Pro
100 105 110

Val Ser Ser Thr Val Pro Ala Pro Ser Pro Leu Ser Ala Ala Ala Val
115 120 125

Ser Pro Ser Lys Leu Pro Glu Asp Asp Glu Pro Pro Ala Arg Pro Pro
130 135 140

Pro Pro Pro Pro Ala Ser Val Ser Pro Gln Ala Glu Pro Val Trp Thr
145 150 155 160

Pro Pro Ala Pro Ala Pro Ala Ala Pro Pro Ser Thr Pro Ala Ala Pro
165 170 175

Lys Arg Arg Gly Ser Ser Gly Ser Val Val Val Asp Leu Leu Tyr Trp
180 185 190

Arg Asp Ile Lys Lys Thr Gly Val Val Phe Gly Ala Ser Leu Phe Leu
195 200 205

Leu Leu Ser Leu Thr Val Phe Ser Ile Val Ser Val Thr Ala Tyr Ile
210 215 220

Ala Leu Ala Leu Leu Ser Val Thr Ile Ser Phe Arg Ile Tyr Lys Gly
225 230 235 240

Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly His Pro Phe Arg Ala
245 250 255

Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu Leu Val Gln Lys Tyr
260 265 270

Ser Asn Ser Ala Leu Gly His Val Asn Cys Thr Ile Lys Glu Leu Arg
275 280 285

Arg Leu Phe Leu Val Asp Asp Leu Val Asp Ser Leu Lys Phe Ala Val
290 295 300

Leu Met Trp Val Phe Thr Tyr Val Gly Ala Leu Phe Asn Gly Leu Thr
305 310 315 320

Leu Leu Ile Leu Ala Leu Ile Ser Leu Phe Ser Val Pro Val Ile Tyr
325 330 335

Glu Arg His Gln Ala Gln Ile Asp His Tyr Leu Gly Leu Ala Asn Lys
340 345 350

Asn Val Lys Asp Ala Met Ala Lys Ile Gln Ala Lys Ile Pro Gly Leu
355 360 365

Lys Arg Lys Ala Glu
370

<210> 25
<211> 199
<212> PRT
<213> Homo sapiens

<400> 25

Met Asp Gly Gln Lys Lys Asn Trp Lys Asp Lys Val Val Asp Leu Leu
1 5 10 15

Tyr Trp Arg Asp Ile Lys Lys Thr Gly Val Val Phe Gly Ala Ser Leu
20 25 30

Phe Leu Leu Leu Ser Leu Thr Val Phe Ser Ile Val Ser Val Thr Ala
35 40 45

Tyr Ile Ala Leu Ala Leu Leu Ser Val Thr Ile Ser Phe Arg Ile Tyr
50 55 60

Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp Glu Gly His Pro Phe
65 70 75 80

Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile Ser Glu Glu Leu Val Gln
85 90 95

Lys Tyr Ser Asn Ser Ala Leu Gly His Val Asn Cys Thr Ile Lys Glu
100 105 110

Leu Arg Arg Leu Phe Leu Val Asp Asp Leu Val Asp Ser Leu Lys Phe
115 120 125

Ala Val Leu Met Trp Val Phe Thr Tyr Val Gly Ala Leu Phe Asn Gly
130 135 140

Leu Thr Leu Leu Ile Leu Ala Leu Ile Ser Leu Phe Ser Val Pro Val
145 150 155 160

Ile Tyr Glu Arg His Gln Ala Gln Ile Asp His Tyr Leu Gly Leu Ala
 165 170 175

Asn Lys Asn Val Lys Asp Ala Met Ala Lys Ile Gln Ala Lys Ile Pro
 180 185 190

Gly Leu Lys Arg Lys Ala Glu
 195

<210> 26
 <211> 473
 <212> PRT
 <213> Homo sapiens

<400> 26

Met Lys Arg Ala Ser Ala Gly Gly Ser Arg Leu Leu Ala Trp Val Leu
 1 5 10 15

Trp Leu Gln Ala Trp Gln Val Ala Ala Pro Cys Pro Gly Ala Cys Val
 20 25 30

Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu
 35 40 45

Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile Phe Leu
 50 55 60

His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg Ala Cys
 65 70 75 80

Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala Arg Ile
 85 90 95

Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Glu Gln Leu Asp Leu
 100 105 110

Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe His Gly
 115 120 125

Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu
 130 135 140

Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr
 145 150 155 160

Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe Arg Asp
165 170 175

Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Ser Ser
180 185 190

Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
195 200 205

Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe Arg Asp
210 215 220

Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Ala
225 230 235 240

Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr Leu Arg
245 250 255

Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
260 265 270

Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Ser
275 280 285

Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Asn
290 295 300

Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro Ile Trp
305 310 315 320

Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys Cys Cys
325 330 335

Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro
340 345 350

Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Ser
355 360 365

Pro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe
370 375 380

Gly Thr Leu Pro Gly Ser Ala Glu Pro Pro Leu Thr Ala Val Arg Pro
385 390 395 400

Glu Gly Ser Glu Pro Pro Gly Phe Pro Thr Ser Gly Pro Arg Arg Arg
405 410 415

Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly
420 425 430

Gln Ala Gly Ser Gly Gly Gly Gly Thr Gly Asp Ser Glu Gly Ser Gly
435 440 445

Ala Leu Pro Ser Leu Thr Cys Ser Leu Thr Pro Leu Gly Leu Ala Leu
450 455 460

Val Leu Trp Thr Val Leu Gly Pro Cys
465 470

<210> 27
<211> 473
<212> PRT
<213> Mus musculus

<400> 27

Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Leu Ala Trp Val Leu
1 5 10 15

Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val
20 25 30

Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu
35 40 45

Gln Ala Val Pro Thr Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu
50 55 60

His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Gln Ser Cys
65 70 75 80

Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Arg Ile
85 90 95

Asp Ala Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu
100 105 110

Ser Asp Asn Ala Gln Leu His Val Val Asp Pro Thr Thr Phe His Gly
115 120 125

Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Arg Glu
130 135 140

Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr
145 150 155 160

Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp
165 170 175

Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser
180 185 190

Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
195 200 205

Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp
210 215 220

Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met
225 230 235 240

Leu Pro Ala Glu Val Leu Met Pro Leu Arg Ser Leu Gln Tyr Leu Arg
245 250 255

Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
260 265 270

Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn
275 280 285

Leu Pro Gln Arg Leu Ala Asp Arg Asp Leu Lys Arg Leu Ala Ala Ser
290 295 300

Asp Leu Glu Gly Cys Ala Val Ala Ser Gly Pro Phe Arg Pro Ile Gln
305 310 315 320

Thr Ser Gln Leu Thr Asp Glu Glu Leu Leu Ser Leu Pro Lys Cys Cys
325 330 335

Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro

340							345							350						
Ala	Ser	Ala	Gly	Asn	Ala	Leu	Lys	Gly	Arg	Val	Pro	Pro	Gly	Asp	Thr					
		355					360					365								
Pro	Pro	Gly	Asn	Gly	Ser	Gly	Pro	Arg	His	Ile	Asn	Asp	Ser	Pro	Phe					
	370					375					380									
Gly	Thr	Leu	Pro	Ser	Ser	Ala	Glu	Pro	Pro	Leu	Thr	Ala	Leu	Arg	Pro					
385					390					395					400					
Gly	Gly	Ser	Glu	Pro	Pro	Gly	Leu	Pro	Thr	Thr	Gly	Pro	Arg	Arg	Arg					
				405				410						415						
Pro	Gly	Cys	Ser	Arg	Lys	Asn	Arg	Thr	Arg	Ser	His	Cys	Arg	Leu	Gly					
			420				425						430							
Gln	Ala	Gly	Ser	Gly	Ala	Ser	Gly	Thr	Gly	Asp	Ala	Glu	Gly	Ser	Gly					
		435					440					445								
Ala	Leu	Pro	Ala	Leu	Ala	Cys	Ser	Leu	Ala	Pro	Leu	Gly	Leu	Ala	Leu					
	450					455					460									
Val	Leu	Trp	Thr	Val	Leu	Gly	Pro	Cys												
465					470															

```
<210> 28
<211> 15
<212> PRT
<213> Artificial Sequence
```

Ser Gly Val Pro Ser Asn Leu Pro Gln Arg Leu Ala Gly Arg Asp
1 5 10 15

Thr	Arg	Ser	His	Cys	Arg	Leu	Gly	Gln	Ala	Gly	Ser	Gly	Ser	Ser
1				5					10					15

170240 " 647440 647450